

**State of California
Office of Administrative Law**

In re:
Department of Conservation

Regulatory Action:

Title 14, California Code of Regulations

Adopt sections: 1760.1, 1779.1

Amend sections:

Repeal sections:

**NOTICE OF APPROVAL OF EMERGENCY
REGULATORY ACTION**

**Government Code Sections 11346.1 and
11349.6**

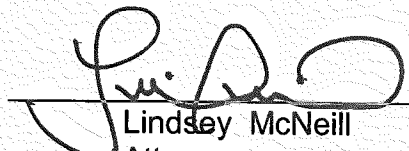
OAL File No. 2015-0409-02 E

This emergency rulemaking action by the Department of Conservation (DOC) adopts sections 1760.1 and 1779.1 in title 14 of the California Code of Regulations to provide an aquifer exemption compliance schedule for the oil and gas industry. This rulemaking action establishes deadlines for the oil and gas industry to obtain aquifer exemptions in an effort to bring California's Class II Underground Injection Control program into compliance with the federal Safe Drinking Water Act.

OAL approves this emergency regulatory action pursuant to sections 11346.1 and 11349.6 of the Government Code.

This emergency regulatory action is effective on 4/20/2015 and will expire on 10/20/2015. The Certificate of Compliance for this action is due no later than 10/19/2015.

Date: 4/20/2015



Lindsey McNeill
Attorney

**For: DEBRA M. CORNEZ
Director**

**Original: Mark Nechodom
Copy: Justin Turner**

NOTICE PUBLICATION/REGULATIONS SUBMISSION

(See instructions on reverse)

For use by Secretary of State only

STD. 400 (REV. 01-2013)

OAL FILE NUMBERS	NOTICE FILE NUMBER Z-	REGULATORY ACTION NUMBER	EMERGENCY NUMBER 2015-0409-02E
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For use by Office of Administrative Law (OAL) only

2015 APR -9 A 10:57

OFFICE OF
ADMINISTRATIVE LAW
ENDORSED - FILED
 In the office of the Secretary of State
 of the State of California

'APR 20 2015
3:20 PM

NOTICE	REGULATIONS
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 AGENCY WITH RULEMAKING AUTHORITY
 Department of Conservation

AGENCY FILE NUMBER (if any)

A. PUBLICATION OF NOTICE (Complete for publication in Notice Register)

1. SUBJECT OF NOTICE		TITLE(S)	FIRST SECTION AFFECTED	2. REQUESTED PUBLICATION DATE
3. NOTICE TYPE <input type="checkbox"/> Notice re Proposed Regulatory Action <input type="checkbox"/> Other		4. AGENCY CONTACT PERSON	TELEPHONE NUMBER	FAX NUMBER (Optional)
OAL USE ONLY	ACTION ON PROPOSED NOTICE <input type="checkbox"/> Approved as Submitted <input type="checkbox"/> Approved as Modified <input type="checkbox"/> Disapproved/Withdrawn		NOTICE REGISTER NUMBER	PUBLICATION DATE

B. SUBMISSION OF REGULATIONS (Complete when submitting regulations)

1a. SUBJECT OF REGULATION(S) Aquifer Exemption Compliance Schedule	1b. ALL PREVIOUS RELATED OAL REGULATORY ACTION NUMBER(S)
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2. SPECIFY CALIFORNIA CODE OF REGULATIONS TITLE(S) AND SECTION(S) (Including title 26, if toxics related)

SECTION(S) AFFECTED (List all section number(s) individually. Attach additional sheet if needed.)	ADOPT 1760.1, 1779.1
	AMEND
	REPEAL
TITLE(S) 14	

3. TYPE OF FILING

<input type="checkbox"/> Regular Rulemaking (Gov. Code §11346)	<input type="checkbox"/> Certificate of Compliance: The agency officer named below certifies that this agency complied with the provisions of Gov. Code §§11346.2-11347.3 either before the emergency regulation was adopted or within the time period required by statute.	<input type="checkbox"/> Emergency Readopt (Gov. Code, §11346.1(h))	<input type="checkbox"/> Changes Without Regulatory Effect (Cal. Code Regs., title 1, §100)
<input type="checkbox"/> Resubmittal of disapproved or withdrawn nonemergency filing (Gov. Code §§11349.3, 11349.4)	<input type="checkbox"/> Resubmittal of disapproved or withdrawn emergency filing (Gov. Code, §11346.1)	<input type="checkbox"/> File & Print	<input type="checkbox"/> Print Only
<input checked="" type="checkbox"/> Emergency (Gov. Code, §11346.1(b))		<input type="checkbox"/> Other (Specify) _____	

4. ALL BEGINNING AND ENDING DATES OF AVAILABILITY OF MODIFIED REGULATIONS AND/OR MATERIAL ADDED TO THE RULEMAKING FILE (Cal. Code Regs. title 1, §44 and Gov. Code §11347.1)**5. EFFECTIVE DATE OF CHANGES (Gov. Code, §§ 11343.4, 11346.1(d); Cal. Code Regs., title 1, §100)**

<input type="checkbox"/> Effective January 1, April 1, July 1, or October 1 (Gov. Code §11343.4(a))	<input checked="" type="checkbox"/> Effective on filing with Secretary of State	<input type="checkbox"/> §100 Changes Without Regulatory Effect	<input type="checkbox"/> Effective other (Specify) _____
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6. CHECK IF THESE REGULATIONS REQUIRE NOTICE TO, OR REVIEW, CONSULTATION, APPROVAL OR CONCURRENCE BY, ANOTHER AGENCY OR ENTITY

<input type="checkbox"/> Department of Finance (Form STD. 399) (SAM §6660)	<input type="checkbox"/> Fair Political Practices Commission	<input type="checkbox"/> State Fire Marshal
<input type="checkbox"/> Other (Specify) _____		

7. CONTACT PERSON Justin Turner	TELEPHONE NUMBER 916-322-2405	FAX NUMBER (Optional)	E-MAIL ADDRESS (Optional) justin.turner@conservation.ca.gov
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8. I certify that the attached copy of the regulation(s) is a true and correct copy of the regulation(s) identified on this form, that the information specified on this form is true and correct, and that I am the head of the agency taking this action, or a designee of the head of the agency, and am authorized to make this certification.

SIGNATURE OF AGENCY HEAD OR DESIGNEE

DATE

3/19/2015

TYPED NAME AND TITLE OF SIGNATORY

Mark Nechodom, Director

For use by Office of Administrative Law (OAL) only

ENDORSED APPROVED

APR 20 2015

Office of Administrative Law

AQUIFER EXEMPTION COMPLIANCE SCHEDULE REGULATIONS

FINAL TEXT OF EMERGENCY REGULATIONS

CHAPTER 4. DEVELOPMENT, REGULATION, AND CONSERVATION OF OIL AND GAS RESOURCES

Subchapter 2. Environmental Protection

THE FOLLOWING SECTIONS ARE ADDED TO SUBCHAPTER 2:

Article 2. Definitions

1760.1. Definitions.

(a) The following definitions are applicable to this subchapter:

(1) "Aquifer" means a geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.

(2) "Aquifer exemption" means an aquifer exemption proposed by the Division and approved pursuant to the Code of Federal Regulations, title 40, section 144.7.

(3) "Hydrocarbon producing zone" means the portion of an aquifer that is hydrocarbon producing, or can be demonstrated to the Division's satisfaction to contain hydrocarbons that considering their quantity and location are expected to be commercially producible.

(4) "TDS" means milligrams per liter of total dissolved solids content.

NOTE: Authority cited: Section 3013, Public Resources Code. Reference: Section 3106, Public Resources Code; 40 C.F.R. 144.7.

Article 3. Requirements

1779.1. Deadlines for Obtaining Aquifer Exemption.

(a) An underground injection project approved by the Division for injection into an aquifer that has not received an aquifer exemption is subject to the following restrictions:

(1) If the portion of the aquifer where injection is approved is not a hydrocarbon producing zone and the groundwater has less than 3,000 TDS, then injection shall cease by October 15, 2015, unless and until there is an aquifer exemption for the aquifer or the portion of the aquifer where injection is occurring.

(2) If the portion of the aquifer where injection is approved is not a hydrocarbon producing zone and the groundwater has between 3,000 and 10,000 TDS, then

injection shall cease by February 15, 2017, unless and until there is an aquifer exemption for the aquifer or the portion of the aquifer where injection is occurring.

(3) If the portion of the aquifer where injection is approved is a hydrocarbon producing zone and the groundwater has less than 10,000 TDS, then injection shall cease by February 15, 2017, unless and until there is an aquifer exemption for the aquifer or the portion of the aquifer where injection is occurring.

(b) For any underground injection project approved by the Division for injection into one of the 11 aquifers listed in subdivision (b)(1), injection shall cease by December 31, 2016, unless and until the U.S Environmental Protection Agency, subsequent to April 20, 2015, determines that the aquifer or the portion of the aquifer where injection is occurring meets the criteria for aquifer exemption.

(1) The following are the 11 aquifers subject to this subdivision:

- (A) The Pico formation within the boundaries of the South Tapo Canyon field;
- (B) The Tumey formation within the boundaries of the Blackwell's Corner field;
- (C) The Kern River formation within the boundaries of the Kern Bluff field;
- (D) The Santa Margarita formation within the boundaries of the Kern Front field;
- (E) The Chanac formation within the boundaries of the Kern River field;
- (F) The Santa Margarita formation within the boundaries of the Kern River field;
- (G) The Walker formation within the boundaries of the Mount Poso field;
- (H) The Olcese formation within the boundaries of the Round Mountain field;
- (I) The Walker formation within the boundaries of the Round Mountain field;
- (J) All aquifers within the Bunker Gas field that are not in a hydrocarbon producing zone and that have groundwater that has less than 10,000 TDS; and
- (K) All aquifers within the Wild Goose field that are not in a hydrocarbon producing zone and that have groundwater that has less than 10,000 TDS.

(2) For the purposes of this section, the boundaries of the fields listed in subdivision (b)(1) are defined by Division of Oil, Gas, and Geothermal Resources Field Boundary Specifications 1 through 9, dated April 1, 2015, hereby incorporated by reference (publicly available at [ftp://ftp.consrv.ca.gov/pub/oil/UIC Files/Boundary Maps/DOGGR Field Boundary Specifications 1 through 9.pdf](ftp://ftp.consrv.ca.gov/pub/oil/UIC%20Files/Boundary%20Maps/DOGGR%20Field%20Boundary%20Specifications%201%20through%209.pdf)).

(c) Notwithstanding subdivisions (a) and (b), approval of an underground injection project, rescission of an approval of an underground injection project, and restriction of an approval of an underground injection project are all at the discretion of the Division.

(d) Any person who violates this section is subject to a minimum civil penalty of \$20,000 for each well for each day injection occurs. The Division may impose a greater civil penalty based on consideration of the extent of harm, persistence, pervasiveness, and prior occurrences of the violation, but in no case shall the civil penalty be greater than \$25,000 for each well for each day injection occurs.

NOTE: Authority cited: Section 3013, Public Resources Code. Reference: Sections 3106, 3220, 3222 and 3236.5, Public Resources Code; 40 C.F.R. 144.3 and 144.7.

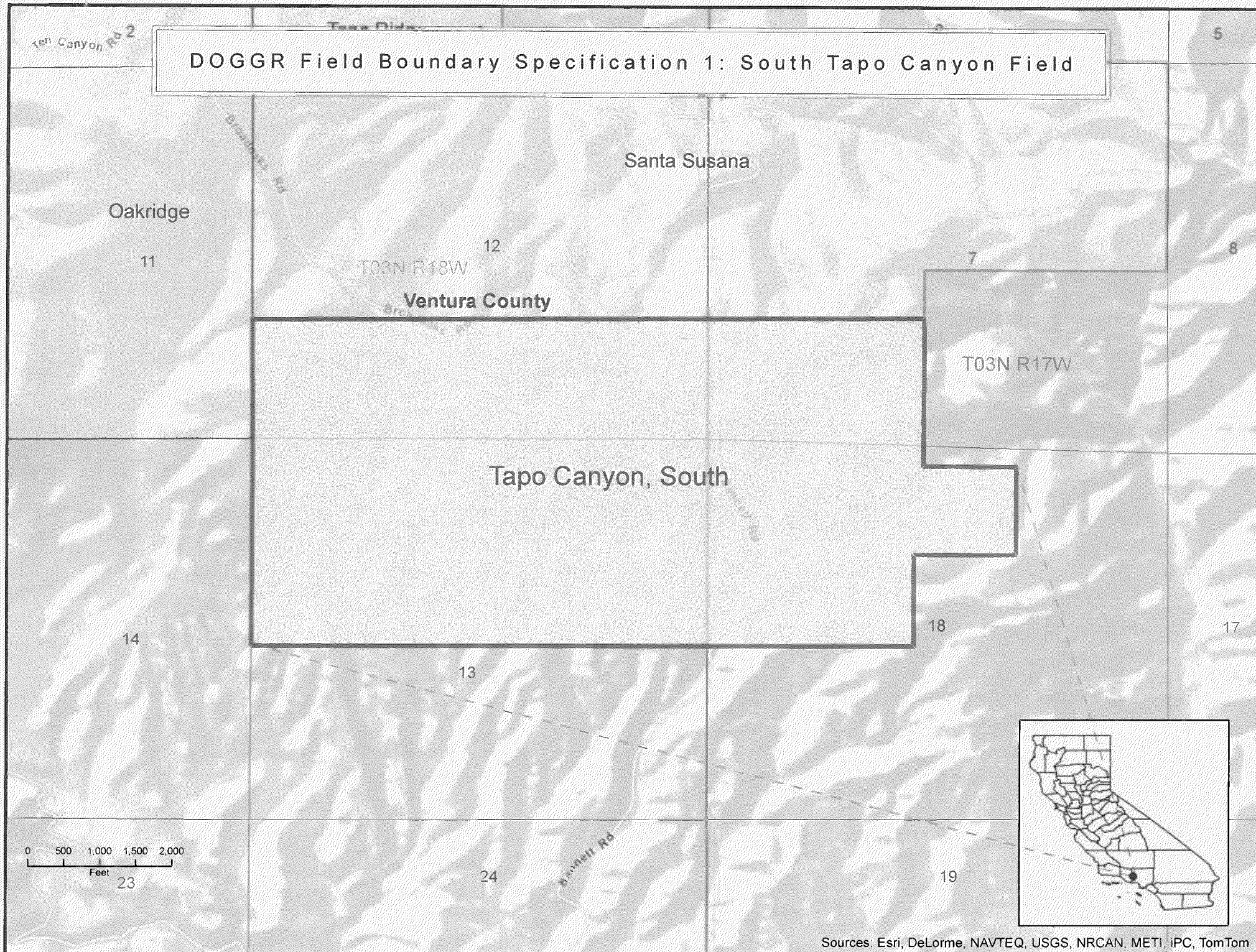
Division of Oil, Gas, and Geothermal Resources

Field Boundary Specifications 1 through 9

April 1, 2015

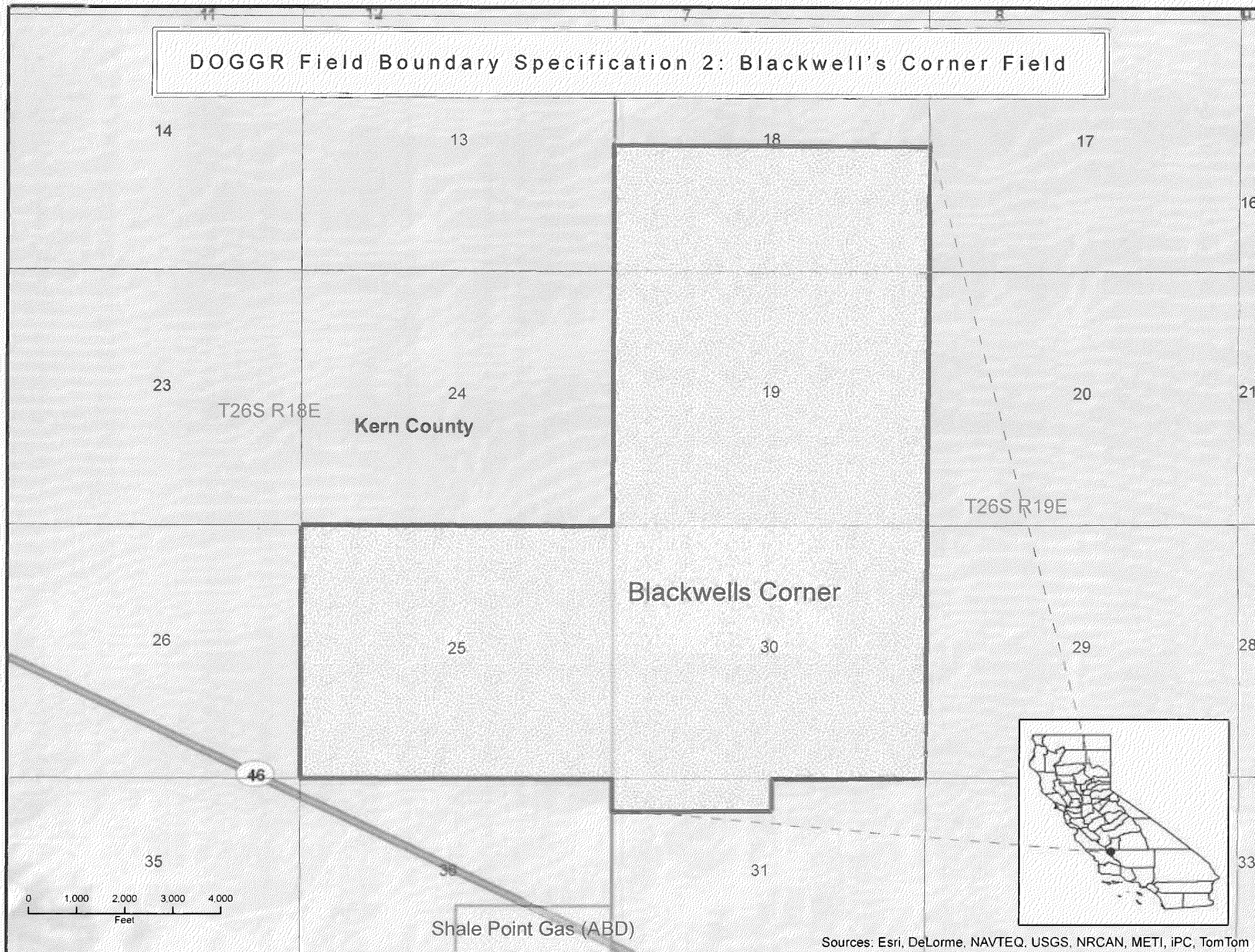
South Tapo Canyon field
Blackwell's Corner field
Kern Bluff field
Kern Front field
Kern River field
Mount Poso field
Round Mountain field
Bunker Gas field
and
Wild Goose field

DOGGR Field Boundary Specification 1: South Tapo Canyon Field



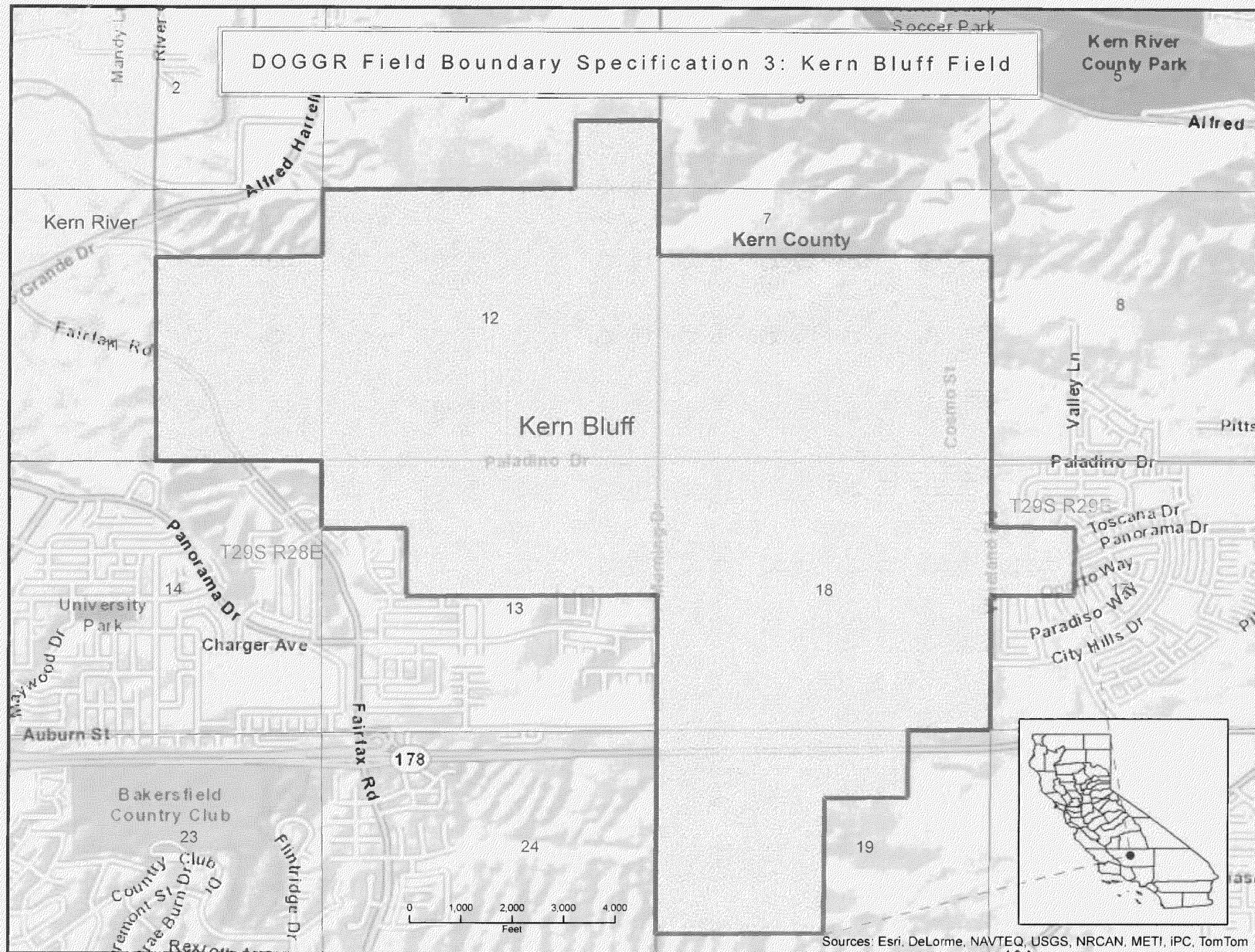
Sources: Esri, DeLorme, NAVTEQ, USGS, NRCAN, METI, IPC, TomTom

DOGGR Field Boundary Specification 2: Blackwell's Corner Field



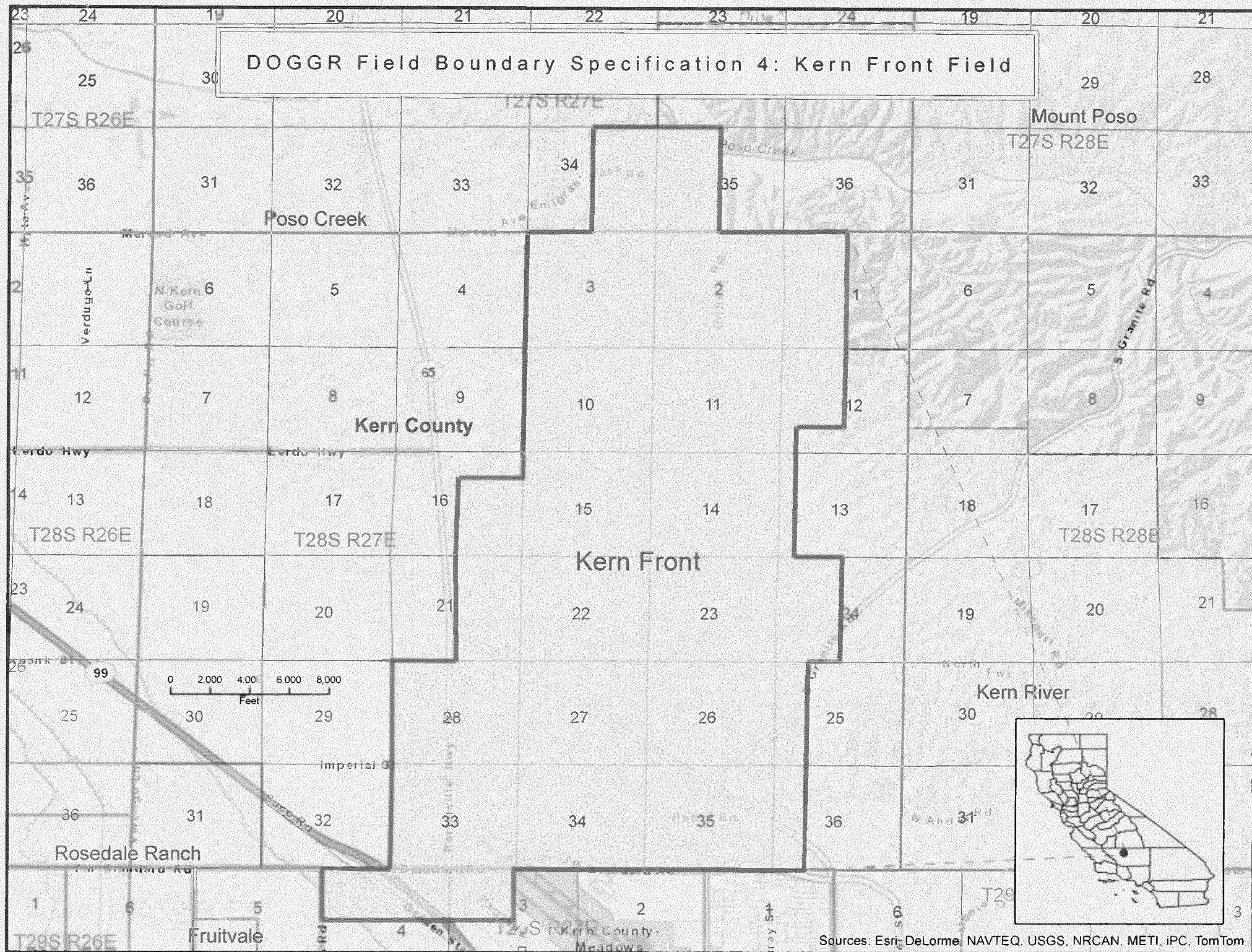
Sources: Esri, DeLorme, NAVTEQ, USGS, NRCAN, METI, iPC, TomTom

DOGGR Field Boundary Specification 3: Kern Bluff Field



Sources: Esri, DeLorme, NAVTEQ, USGS, NRCAN, METI, IPC, TomTom

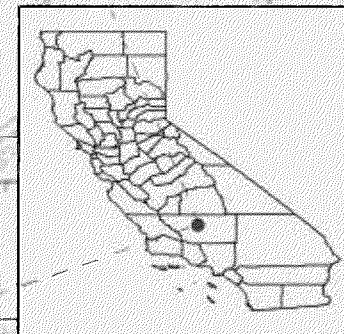
DOGGR Field Boundary Specification 4: Kern Front Field



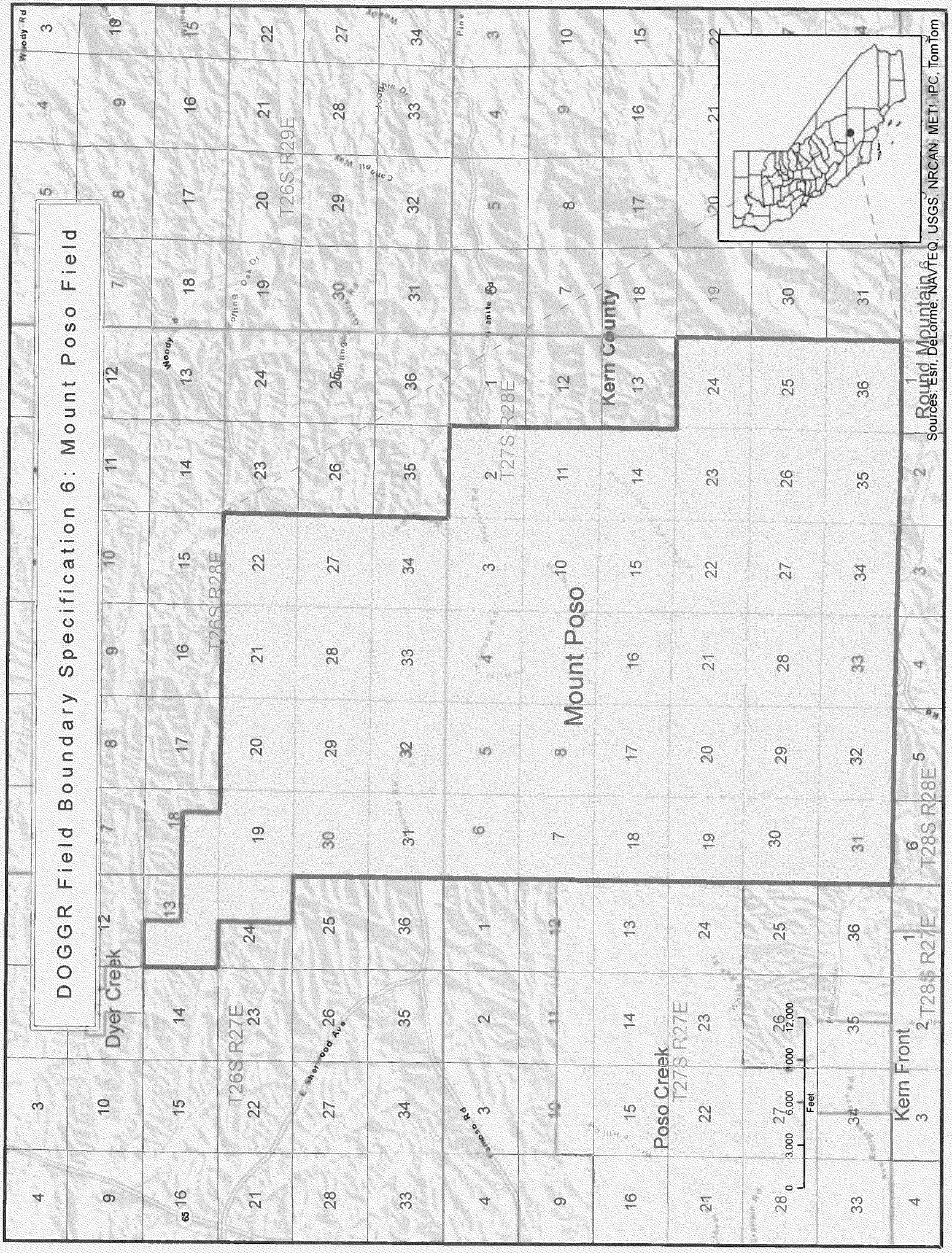
Sources: Esri, DeLorme, NAVTEQ, USGS, NRCAN, METI, IPC, TomTom

DOGGR Field Boundary Specification 5: Kern River Field

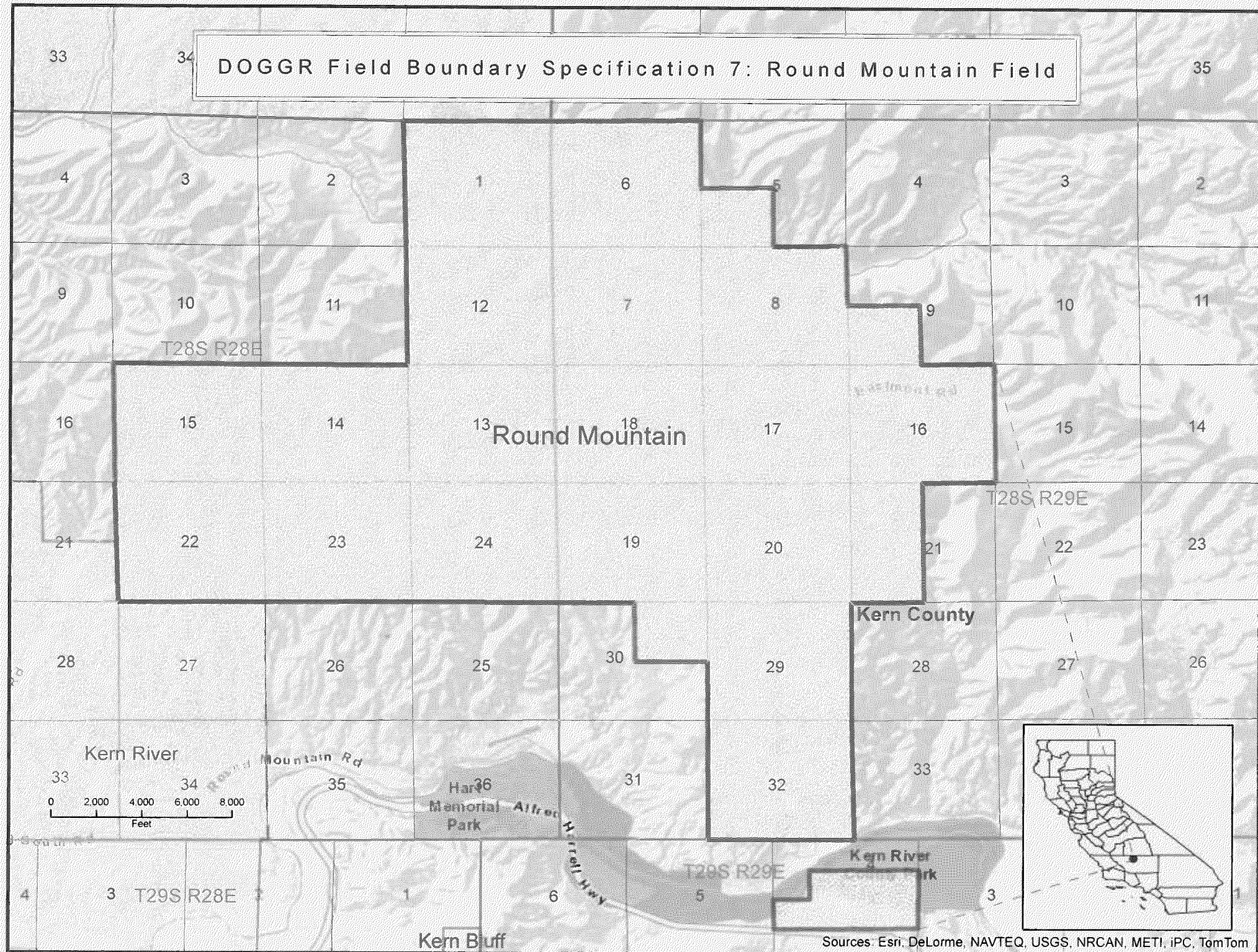
0 2,000 4,000 6,000 8,000
Feet



Sources: Esri, DeLorme, NAVTEQ, USGS, NRCAN, METI, IPC, TomTom

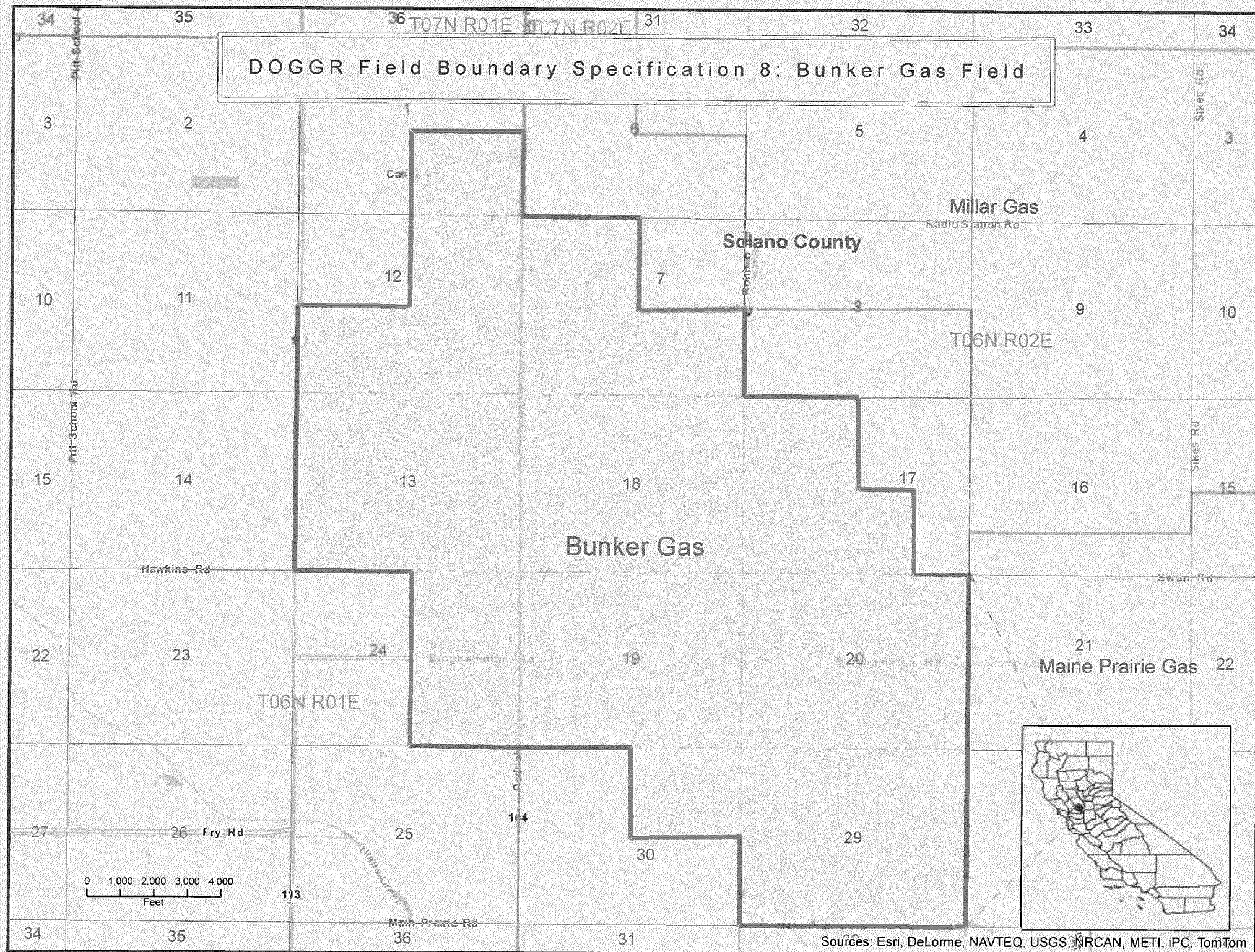


DOGGR Field Boundary Specification 7: Round Mountain Field



Sources: Esri, DeLorme, NAVTEQ, USGS, NRCAN, METI, IPC, TomTom

DOGGR Field Boundary Specification 8: Bunker Gas Field



DOGGR Field Boundary Specification 9: Wild Goose Gas Field

Colusa County

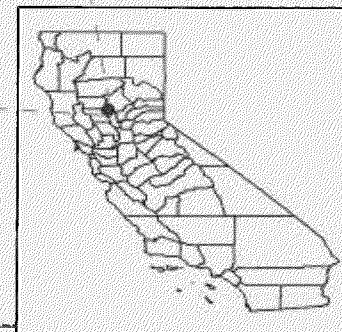
Butte County

T17N R01W

T17N R01E

Wild Goose Gas

0 500 1,000 1,500 2,000
Feet



AQUIFER EXEMPTION COMPLIANCE SCHEDULE REGULATIONS

EMERGENCY RULEMAKING COMMENT RESPONSE

Comment Summary:

The Department of Conservation, Division of Oil, Gas, and Geothermal Resources (Division) must use its existing powers to immediately close down the approximately 2,500 wells illegally injecting toxic industry wastewater into federally protected aquifers. The Division has the power, ability and capacity to shut in illegal wells. California is suffering from a historic drought that warrants emergency action. The timeline for stopping pollution outlined in the proposed regulations does not provide necessary protections.

Under the proposed regulations, the improperly permitted wells will be allowed to continue injecting for in some cases up to two more years while the compliance plan is carried out. This presents an unacceptable risk to USDWs. Despite being aware of the potential dangers to the state's aquifers, the Division has chosen to allow industry to threaten water supplies in the highest quality aquifers until mid-October 2015. It is unclear how the proposed compliance schedule is consistent with state and federal mandates to protect groundwater that could be and is being used for drinking water and other beneficial uses.

Organizations: California League of Conservation Voters, Center for Biological Diversity, Citizens Coalition for a Safe Community, Clean Water Action, Environmental Working Group, Los Angeles Waterkeeper, Los Padres Forest Watch, Natural Resources Defence Council, San Diego 350, and Sierra Club California; Individuals: Marjorie Bundschuh, Daniel Ferra, Jeffrey Meyer, Chris Lish, Carol Weed, and Nancy Yuen; California State Legislators: Asm. Rob Bonta, Asm. David Chiu, Sen. Loni Hancock, Sen. Hannah-Beth Jackson, Sen. Mark Leno, Asm. Marc Levine, Sen. Mike McGuire, Sen. Bill Monning, Sen. Fran Pavely, Asm. Anthony Rendon, Asm. Mark Stone, Asm. Philip Ting, Sen. Bob Wieckowski, Asm. Das Williams, Sen. Lois Wolk, and Asm. Jim Wood

Response to Comments:

The Division appreciates and shares the commenters' concerns with the protection of our state's groundwater resources. Protecting public health and the state's groundwater resources is this Administration's primary goal, particularly in this time of unprecedented drought. We take very seriously any practices that undermine our efforts to achieve that goal. That is why, in June of last year, we immediately assembled an interagency team to assess the scope of the problems related to the management of the UIC program and to address any potential risk to public health and the state's groundwater supplies. The initial response included immediately shutting down 11 injection wells that represented the greatest risk of contamination, halting approvals of new wells in non-exempt areas

and initiating a systematic review of other wells to ensure protection of public health and environmental safety. This review process has included analyzing the water quality in the injection zones and identifying the potential for contamination of water supply wells. Analyses of groundwater samples collected from water supply wells by Central Valley Regional Water Board staff have not identified elevated concentrations of chemical constituents that appear to have been caused by injection of produced waters. We are requiring additional groundwater sampling by injection well operators in areas that show potential risk to water supply wells.

On March 9, 2015, the US EPA agreed to a compliance plan jointly submitted by the Division and the State Water Resources Control Board for the state's UIC program. This plan included a compliance schedule, prioritization and criteria utilized for injection well reviews, and criteria for triggering the closure of an injection well. All aspects of this plan were developed as a result of extensive discussions and collaboration with US EPA. With respect to the approximately 2,500 injection wells that are under review at the Division and the State Water Resources Control Board, it is critical to not treat them uniformly, but rather evaluate them more precisely based on their individual characteristics. For example, approximately 80 percent of these wells have been identified as injecting into water that naturally contains oil-related compounds (i.e. hydrocarbon producing zones). Groundwater within hydrocarbon producing zones may not be suitable for drinking water or other beneficial uses. Because of that, these injection zones (aquifers) are candidates for exemption from the Safe Drinking Water Act.

The remaining injection wells that are disposing wastewater into non-hydrocarbon producing zones are being reviewed on a priority basis. One category of these disposal wells are those injecting into non-hydrocarbon-producing zones with 3,000 to 10,000 milligrams per liter of total dissolved solid (TDS). In certain cases, this water can be suitable for agricultural and other beneficial uses, but we are not aware of any instances where this water has been deemed suitable for drinking purposes in the state. There are 356 wells in this category and in some cases, the aquifers into which injection is taking place may contain hydrocarbons. These are high priority wells, after those in areas that are potentially impacting water supply wells as explained below.

The wells that have received immediate review and action by the State are those disposing produced water into non-hydrocarbon-producing zones with water quality of less than 3000 TDS. As part of that review, the Division and the State Water Board have identified 176 injection wells that fall into this category. The agencies have almost completed the review of these wells and, to date, have taken actions to shut in 23 injection wells and have issued orders requesting information from the operators on aquifer water quality and injected fluid characteristics. The prioritization of the well

reviews and the criteria being used to determine shutting down injection wells is the result of focused collaboration among US EPA, the Division and the Water Board. This review process will continue to ensure that additional shut downs of injection wells occur as soon as an unacceptable risk is identified.

This rulemaking is in addition to the ongoing well review and one-by-one closure of injection wells, and the purpose of this rulemaking action is to bring all injection operations in compliance with the Safe Drinking Water Act in an efficient manner. The wells injecting into non-exempt USDW aquifers were approved by the State, and administrative action is required to reverse those approvals. This rulemaking will unwind approvals on a statewide basis by dates certain, and will impose maximum civil penalties for injection after those dates.

Compliance schedules are routinely used by all sorts of regulators, and are a legitimate exercise of prosecutorial discretion. The compliance schedule that US EPA approved and directed the Division to follow prioritizes protection of the state's groundwater resources while avoiding unnecessary disruption of operations where there is no apparent threat to groundwater that might reasonably be expected to be a source of drinking water. In conjunction with the ongoing well review and immediate closure of injection wells that pose even a potential threat to public safety, the compliance schedule will effectively and efficiently meet federal and state mandates to protect groundwater resources.

Although commenters believe that the compliance schedule is not aggressive enough, invalidation of this rulemaking action would not bring us closer to achieving compliance with the Safe Drinking Water Act. Without the use of rulemaking, the Division would have to use individual enforcement orders to unwind existing approvals and achieve compliance. Adjudication of enforcement orders takes time and resources, and, given the number of wells in question, it would be a substantial undertaking for the Division to achieve statewide compliance without the use of rulemaking. Without this rulemaking, it would likely take longer, and would certainly require greater State resources, to completely unwind all State-approved injection into non-exempt USDW aquifers.

AQUIFER EXEMPTION COMPLIANCE SCHEDULE REGULATIONS

REVISED FINDING OF EMERGENCY

Government Code section 11346.1, subdivision (b), allows a state agency to adopt emergency regulations if the agency makes a finding that the adoption of a regulation is necessary to address a situation calling for immediate action to avoid serious harm to the public peace, health, safety, or general welfare. The Department of Conservation finds that emergency adoption of the regulations proposed herein regarding a compliance schedule for eliminating injection into aquifers that are protected under the federal Safe Drinking Water Act, is necessary for immediate preservation of the public peace, health, safety, or general welfare.

Basis for the Finding of Emergency:

- In 1983, the Division of Oil, Gas, and Geothermal Resources (Division) within the Department, obtained approval from the United States Environmental Protection Agency (US EPA) to implement and enforce requirements of the federal Safe Drinking Water Act for the protection of underground sources of drinking water pursuant to the State's Class II Underground Injection Control (UIC) program. The Division has primary responsibility for regulating injection wells associated with oil and gas production pursuant to the UIC program, which is subject to US EPA oversight.
- The Safe Drinking Water Act requires that an underground source of drinking water (USDW) be protected from contamination by injection wells. USDWs are generally aquifers with water quality measured at less than 10,000 milligrams per liter of total dissolved solids (mg/L TDS), but, upon recommendation by the State, US EPA may exempt individual aquifers in accordance with criteria specified in the federal regulations. (40 C. F.R. 144.3 and 144.7 (2015).) In the course of ongoing corrective review, the Division has identified over 2,500 wells that may have been improperly approved for injection into non-exempt aquifers protected by the Safe Drinking Water Act.
- US EPA, the Division, and the State Water Resources Control Board (SWRCB) have engaged in intensive discussions intended to determine the appropriate corrective actions, and those discussions have culminated in a detailed corrective action plan deemed necessary by US EPA to bring the State's UIC program into compliance with the Safe Drinking Water Act.

- The corrective action plan calls for the Division to implement a compliance schedule for phasing out injection into USDWs, either by obtaining the necessary aquifer exemptions or by halting injection into the aquifers. Specifically, US EPA's direction sets forth the following compliance deadlines:
 - October 15, 2015 – shut-in deadline for wells injecting into non-hydrocarbon-bearing aquifers with less than 3,000 mg/L TDS that do not have an aquifer exemption
 - December 31, 2016 – shut-in deadline for wells injecting into 11 specific aquifers historically treated as exempt by US EPA, unless US EPA takes further action to affirm exemption of the pertinent aquifer(s) before that deadline
 - February 15, 2017 – shut-in deadline for all wells injecting into aquifers with less than 10,000 mg/L TDS that do not have an aquifer exemption
- US EPA has made clear that the Division's failure to phase out injection into the affected aquifers by the stipulated compliance deadlines would seriously jeopardize the federal government's ongoing approval of the State's UIC program as an effective program to protect underground sources of drinking water as required by the Safe Drinking Water Act. One of the grounds for US EPA to withdraw primacy approval of a state program is when the state program fails to comply with the terms of the Primacy Agreement and the state fails to take corrective action satisfactory to US EPA. (40 C.F.R. § 145.33.)
- The central purposes of state primacy under the Safe Drinking Water Act is to harmonize regulation under a single regulatory entity with expertise in local geology and operations. US EPA has never directly regulated injection operations in California and therefore does not have infrastructure or expertise in place to do so. The Division regulates over 50,000 injection wells statewide through six district offices staffed with engineers with extensive experience regulating oil and gas operations in this state. California is well known for its unique and complex geology, and knowledge of that geology is critical to effective regulation of injection operations. In addition, California has the most complex range of oil and gas extraction techniques in the world. It would therefore be a decade-long process for US EPA to develop an effective regulatory presence in a state of this size, activity, and complexity, and the ability to effectively enforce the regulations would certainly suffer in the meantime. At the same time, significant regulatory uncertainty and burden would be introduced as regulation of oil and gas operations would be divided between state and federal entities. Operators would likely be faced with regulatory duplication and conflict as they would be required to comply with two separate regulatory schemes administered by two separate agencies for different aspects of the same operations. Such regulatory duplication and conflict

would lower the quality of environmental protection, while increasing the regulatory burden on industry.

- The timeframe for the non-emergency rulemaking process would not enable an enforceable regulatory compliance schedule to be adopted before critical compliance deadlines will have already passed. That outcome would fail to satisfy US EPA's direction to the Division. Indeed, US EPA specifically contemplated utilization of the emergency regulation process in its directive.
- Failure to adopt the compliance schedule by emergency regulation would be detrimental to public health and safety. The wells injecting into non-exempt USDW aquifers were approved by the State, and administrative action is required to reverse those approvals. This rulemaking will unwind approvals on a statewide basis by dates certain, and will impose maximum civil penalties for injection after those dates. Without the use of rulemaking, the Division would have to use individual enforcement orders to unwind existing approvals and achieve compliance. Adjudication of enforcement orders takes time and resources, and, given the number of wells in question, it would be a substantial undertaking for the Division to achieve statewide compliance without the use of rulemaking. Without this rulemaking, it would likely take longer, and would certainly require greater State resources, to completely unwind all State-approved injection into non-exempt USDW aquifers.
- The Division anticipates that many of the aquifers previously approved to receive injection without an aquifer exemption in place will in fact qualify for exemptions. However, obtaining an aquifer exemption is a complex process involving multiple stages of rigorous examination over an extended period of time. First, operators seeking an exemption for a protected aquifer must prepare a package of evidence demonstrating that the aquifer meets the criteria for exemption. Next, the Division and the SWRCB will each independently review the evidence package to determine whether it warrants the State recommending an aquifer exemption. This state-level review incorporates opportunity for public participation, potentially including a public hearing and a public comment period. If the Division and the SWRCB agree, a recommendation to adopt the aquifer exemption will be submitted to US EPA. US EPA will then undertake its own review of the supporting evidence before reaching a determination to exempt the aquifer or not. US EPA's review process could potentially include publication in the Federal Register and possibly a public comment hearing. Altogether, this multi-stage aquifer exemption process could easily span the full compliance period before exemptions are in place. Defining firm deadlines and criteria immediately is necessary so that operators understand that they must start working towards obtaining any appropriate aquifer exemptions as soon as possible.

- Regulated industry operators develop long-range business plans with substantial capital investments based around the operation of injection wells. To the extent that any wells need to be shut-in, codification of the compliance schedule as an emergency regulation will provide the level of certainty operators need in order to revise their business plans accordingly. Even shut-in deadlines as far as two years into the future necessitate implementation of immediate planning considerations to avoid substantial transaction costs. This is particularly important for smaller, independent operators, who typically have less capacity to absorb sudden logistical changes and increased expenses. If the compliance schedule is not implemented as an emergency regulation, the regulated industry may incur substantial and otherwise-avoidable expenses due to prolonged uncertainty in the enforcement landscape. Smaller, independent operators would likely experience the greatest negative financial consequences.
- The 2553 injection wells potentially affected by this compliance schedule are a significant part of California's oil production infrastructure, and abrupt disruption of their operation would be detrimental to general welfare. The Division estimates the capital investment in the affected injection wells and their attendant facilities to be roughly \$1.3 billion. To the extent that alternatives can be identified to replace injection that would be halted by the compliance schedule, significant time, advance planning, and capital investment will be required to drill and construct new wells and develop facilities to replace that injection infrastructure. The Division estimates that approximately 4% of the state's oil production (about 24,000 barrels of production per day) presently relies upon the affected injection wells. In order to avoid any unnecessary disruption of this production, it is critical that the deadlines mandated by US EPA are clearly and finally articulated in regulation as soon as possible so that the regulated industry has as much time as possible to change business plans and organize investment around these compliance deadlines. To the extent that aquifers will qualify for an aquifer exemption, it is imperative that all involved understand that there are firm deadlines for completing the aquifer exemption process, and that qualifying injection operations will be disrupted if the process is not complete by the deadline.
- Oil and gas production in California is a \$34 billion annual industry, employing more than 25,000 people with an annual payroll of over \$1.5 billion. California is the third largest oil-producing state in the nation, producing about 575,000 barrels per day. Property and other taxpayments to the State and local governments from the industry amount to about \$800 million annually. Injection wells have been an integral part of California's oil and gas operations for more than 50 years, and there are over 50,000 oilfield injection wells currently operating in the State.
- The regulated community and the public at large have expressed profound concern about the corrective actions to be taken regarding any injection into non-exempt aquifers protected by the Safe Drinking Water Act. It is important that the

compliance schedule be implemented in an immediate and public manner, so as to maximize the transparency of the corrective actions being undertaken, as well as any associated impacts on public health and safety, the environment, or natural resources.

- In January of 2014, Governor Edmund G. Brown proclaimed an official State of Emergency due to record drought conditions in the State. The governor's proclamation directed state and local agencies to take immediate actions to conserve dwindling water supplies. California is now entering a fourth consecutive year of severe drought. Protection of California's aquifers from contamination is a matter of the highest priority for the Division, and of special importance given the exceptionally dry conditions currently affecting our region.
- Other provisions in the proposed emergency regulations, such as the definitions for key terms, and the provision setting a civil penalty for unlawful injection are included because they are integral to the regulations as a whole. The definitions support consistent interpretation of the proposed regulation, while the civil penalty provision is needed to provide an immediate deterrent that outweighs the potential economic incentives for unlawfully injecting beyond the compliance deadlines.

For these reasons, pursuant to Government Code section 11346.1, subdivision (b), the Department hereby finds that adoption of the proposed regulation is necessary to address an emergency.

Insufficient Time for Non-Emergency Rulemaking

Although the Division has been engaged in an ongoing interagency review of its Class II UIC program for an extended period of time, this review process did not culminate in a definitive schedule for corrective action until March 9, 2015, when US EPA issued a directive requiring the adoption of a specific regulatory compliance schedule. The Division could not have implemented a rulemaking process for the presently-proposed regulation prior to that date because until then there had not yet been a determination of what deadlines would satisfy US EPA's demands for corrective action.

CONSISTENCY WITH EXISTING STATE REGULATIONS

These regulations are the product of extensive consultation between US EPA, the Department, and the SWRCB, and they are not inconsistent or incompatible with existing state regulations. The purpose of these regulations is to achieve compliance with certain requirements of the federal Safe Drinking Water Act, and there are no existing state regulations that are inconsistent with those Safe Drinking Water Act requirements.

REVISED CIVIL PENALTY PROVISION

The civil penalty provision in Section 1779.1, subdivision (d), is revised from what was originally proposed. The minimum civil penalty was reduced from \$25,000 for each well for each day injection occurs, down to \$20,000 for each well for each day injection occurs, allowing for consideration of the factors listed in Public Resources Code section 3236.5, subdivision (a)(1) through (4) when the Division is establishing civil penalties. Consistent with Public Resources Code section 3236.5, in no case will the greater than \$25,000 per violation.

NONDUPLICATION

The definition of “aquifer” found in Section 1760.1, subdivision (a)(1), is identical to the definition of “aquifer” found in the Safe Drinking Water Act implementing regulations (40 C.F.R. 144.3). Inclusion of this definition satisfies the “nonduplication” standard of Government Code section 11349.1, subdivision (a)(6), because the definition is necessary to satisfy the “clarity” standard of Government Code section 11349.1, subdivision (a)(3). (Cal. Code Regs., tit. 1, § 12, subd. (b)(1).) Without inclusion of the federal definition of “aquifer” in these regulations, it would not be clear that the Division intends for that definition to apply.

INCORPORATION BY REFERENCE

The following document is incorporated by reference into these regulations:

- *Division of Oil, Gas, and Geothermal Resources Field Boundary Specifications 1 through 9* (dated April 1, 2015)